

## JUNEAU COMMISSION ON SUSTAINABILITY AGENDA

July 03, 2024 at 12:00 PM

**Zoom Webinar** 

https://juneau.zoom.us/j/88069534778 or Phone 1-253-215-8782 Meeting ID: 880 6953 4778

#### A. CALL TO ORDER

#### B. LAND ACKNOWLEDGEMENT

We would like to acknowledge that the City and Borough of Juneau is on Tlingit land, and wish to honor the indigenous people of this land. For more than ten thousand years, Alaska Native people have been and continue to be integral to the well-being of our community. We are grateful to be in this place, a part of this community, and to honor the culture, traditions, and resilience of the Tlingit people. Gunalchéesh!

- C. ROLL CALL
- D. APPROVAL OF AGENDA
- E. APPROVAL OF MINUTES
  - 1. June 5, 2024 JCOS Regular Meeting Minutes
  - 2. June 25, 2024 JCOS Energy Subcommittee Meeting Minutes
- F. PUBLIC PARTICIPATION
- G. AGENDA TOPICS
  - 3. Recent Outside/In Podcast on Juneau's Hazard Mapping Nick Waldo
  - 4. JCOS Award Presentation Nick Waldo
  - Subcommittee Scheduling Marian Call
  - ETIPP Support Request Lori Sowa, AEL&P & Dianna Robinson (Attached)
    - ETIPP Program Information: Energy Transitions Initiative Partnership Project: Coastal, Remote, and Island Community Technical Assistance | State, Local, and Tribal Governments | NREL
    - Stakeholder Support Form: <u>ETIPP Community Technical Assistance Application</u>

#### H. INFORMATION ITEMS

- 7. Communities Taking Charge Accelerator Lori Sowa, AEL&P (Attached)
- 8. Sustainability Dashboard/Climate Action Community Dashboard Dianna Robinson (Attached)
- I. COMMITTEE MEMBER / LIAISON COMMENTS AND QUESTIONS
- J. NEXT MEETING DATE
  - 9. August 7, 2024, 12:00 PM JCOS Regular Meeting

#### K. ADJOURNMENT

ADA accommodations available upon request: Please contact the Clerk's office 36 hours prior to any meeting so arrangements can be made for closed captioning or sign language interpreter services depending on the meeting format. The Clerk's office telephone number is 586-5278, TDD 586-5351, e-mail: city.clerk@juneau.gov.

#### Juneau Commission on Sustainability (JCOS)

Wednesday, June 5, 2024, noon Minutes

#### A. CALL TO ORDER

Mr. Waldo called the meeting to order at 12:04 pm.

#### B. LAND ACKNOWLEDGEMENT

#### C. ROLL CALL

Present: Laura Achee, Jessica Barker, Marian Call, Steve Behnke, Gretchen Keiser, Duff Mitchell, Jim Powell, David Teal, Nick Waldo

Absent: None

#### A quorum was present.

Staff & Others Present: Assembly Liaison Ella Adkitson, CBJ Staff Dianna Robinson, Brennen McColloch, Ibn Bailey, Ashley Heimbigner

#### D. APPROVAL OF AGENDA

Approved as submitted with the addition of two topics to the information section.

#### E. APPROVAL OF MINUTES

Minutes for the May 1, 2024 JCOS Regular Meeting were approved without objection.

#### F. PUBLIC PARTICIPATION

None

#### G. AGENDA TOPICS

#### 1. Climate Fair - Marian Call

July 27, 2024. Had a table last year. Not a lot of opportunity to reach people unfamiliar with climate/sustainability. Will take about 3 volunteers and a tent if we choose to participate. Ms. Keiser moved to coordinate with Renewable Juneau rather than operate our own table. Motion approved without objection.

#### 2. Subcommittees - Nick Waldo

There were no subcommittee meetings last month.

#### 3. Exiting Members & Open Seats - Nick Waldo

Both Mr. Behnke and Ms. Keiser will complete their terms in June. Mr. Waldo thanked them both for their long and valuable contributions. Members should encourage potential members to apply to the CBJ clerk before the July JCOS meeting. There was consensus that a broader range of member backgrounds would be valuable.

#### H. INFORMATION ITEMS

- 1. CBJ's composting contract is moving along and CBJ has asked to hear from JCOS. Mr. Waldo will write a letter supporting the project in general as an important community sustainability issue, but JCOS will not insert itself into the purchasing process.
- 2. Staff Update Dianna Robinson (attached to meeting packet)
- 3. CBJ Boards, Committees, and Commissions Information Pamphlet Update (attached to meeting packet)
- 4. Mr. Behnke has been working with several statewide, regional and local entities on a local energy grant (ETIPP Grant). CBJ will not take the project lead due to staffing concerns. While there is broad agreement on a project addressing the impacts of electric resistance heating in multi-family housing, potential participants differ on the scope of Juneau's application. Mr. Behnke said he believes that differences will be resolved during the next few weeks.

#### I. COMMITTEE MEMBER / LIAISON COMMENTS AND QUESTIONS

Mr. Mitchell had an informal conversation with Representative Hannon and a Corrections official about the potential for using GHG emissions from the landfill to heat the Lemon Creek Correctional Facility.

#### J. NEXT MEETING DATES

Regular Meeting – July 3, 2024, at 12-1 PM on Zoom

#### K. ADJOURNMENT

The meeting adjourned at 1:07 pm.

Submitted by David Teal, Secretary

#### Juneau Commission on Sustainability (JCOS)

Wednesday, June 25, 2024, noon Minutes

#### A. CALL TO ORDER

Mr. Behnke called the meeting to order at 12:00 pm.

#### B. LAND ACKNOWLEDGEMENT

#### C. ROLL CALL

Present: Steve Behnke (outgoing committee chair,) Gretchen Keiser (also outgoing) Duff Mitchell, Marian Call

#### A quorum was present.

Staff & Others Present: CBJ Staff - Ashley Heimbigner, AELP - Lori Sowa, Brennen McCulloch.

#### D. Discussion

The purpose of the meeting was to update members on the status of major climate/energy topics and to discuss recommendations for moving forward. While the committee did not make a set of formal recommendations, we had a good discussion and agreed to forward the following suggestions to the Commission:

- 1. The Energy Committee needs a new chair, and new members, with the departure of 2 long-time members
- 2. The Energy Committee's focus is on community goals and implementation policies relating to climate mitigation, energy efficiency and the use of Juneau's renewable resources, as reflected in the CBJ Comp. Plan, the Juneau Climate Action and Implementation Plan, and the Juneau Renewable Energy Strategy.
- 3. JCOS should focus on more systematically advising the CBJ and the Assembly on the policies and programs needed to achieve Juneau's sustainability goals.

It should continue to advise the Assembly on their annual goals relating to sustainability. Given the lack of specific staffing capacity related to climate and energy, CBJ staff rely heavily on Assembly annual goals to set priorities. Development of annual sustainability goals has been a bit of a haphazard process in the past -- it should be made more systematic -- for example by working closely with staff and the JCOS Assembly liaison to frame its recommendations well in advance of the annual Assembly retreat. Ideally JCOS would have some sort of discussion with the COW before the annual goal setting session.

JCOS should actively engage in the budget process and the CIP. JCOS has successfully encouraged greater attention to sustainability in the CIP over the past few years. However, last year we were completely unsuccessful in getting

attention to our CIP recommendations. JCOS should discuss with staff how to more effectively incorporate sustainability provisions into the budget and CIP.

Steve recommended that the Energy Committee and JCOS be prepared to work closely with CBJ staff on the ongoing review and update of 49.35.800. Sustainable building standards for construction and renovation of buildings. This is exactly the kind of major policy initiative that should be a priority for JCOS. E&PW intends to bring these to JCOS in September or October.

4. JCOS needs more consistent, systematic and timely information on CBJ and community efforts, initiatives and policies related to sustainability.

There's a lot going on, but no systemic procedures for keeping up, or for timely identification of the areas where JCOS should have input. Dianna has recently started including a slot for monthly updates on CBJ efforts. JCOS should discuss what and advise on what formats would be most helpful for these. Should there be periodic, medium detail updates from CBJ staff and other organizations on major activities (dock electrification, EV infrastructure, EV fleet development, decarbonization of buildings, solid waste, etc.)?

JCOS should continue its focus on the Public Works and Facility Committee meetings. These are where the CBJ specifically and systematically tracks and reports progress on Assembly sustainability goals. JCOS should consider asking for copies of these updates.

- 5. JCOS has made good progress in reviving it's long term efforts at public outreach through it's series of sustainability sessions. It should include energy/climate related topics in future sessions.
- 6. Steve and Gretchen both intend to stay active in Juneau energy and sustainability related issues. Feel free to call on them for context, history and advice. Mr. Mitchell had an informal conversation with Representative Hannon and a Corrections official about the potential for using GHG emissions from the landfill to heat the Lemon Creek Correctional Facility.

#### K. ADJOURNMENT

The meeting adjourned at 1:20 pm.

Submitted by Steve Behnke, Chair, Energy Subcommittee

# Heat Pumps in Multifamily Housing ETIPP Application Narrative

Energy resilience challenges facing Juneau and barriers to address them (such as staff capacity, funding, public policy, stakeholder support): 500 words max

Juneau, Alaska is home to approximately 32,000 residents. Access to Juneau is via plane or ferry – there are no roads connecting Alaska's capital city to other towns. Having to import fuels by air or barge, along with other goods and services, contributes to the high cost of living. Fortunately, one of Juneau's greatest assets is its abundant supply of rain and snow that has been harnessed to produce hydroelectricity. Alaska Electric Light and Power Company (AEL&P), the local electric utility, produces 100 percent of its base-load generation through clean, renewable, and low-cost hydropower. This is accomplished through the operation of five hydropower plants: Snettisham, Lake Dorothy, Annex Creek, Salmon Creek, and Gold Creek. These plants, along with backup diesel plants, feed into the islanded electric grid operated by AEL&P to serve all of Juneau.

In 2018, the City and Borough of Juneau (CBJ) set a goal to obtain 80% of its energy from renewable sources by 2045. The most recent greenhouse gas emissions study conducted on behalf of the CBJ estimates that in 2021, 27% of the energy consumed in Juneau is from electricity and 1% is from wood. The remaining 72% of the energy consumed is from non-renewable, fossil fuel-based sources.

As the community works to achieve the goal of transitioning energy use to 80% renewable, many of the efforts are focused on electrification in the transportation and space heating sectors to take advantage of our clean hydropower. Juneau is a leader in electric vehicle adoption, and many residents are installing heat pumps to compliment or replace their existing space heating systems.

Increasing energy efficiency is a vital component of the successful transition to renewable energy and is often the most cost-effective strategy. While the overall increase in community electricity use has been modest over the past several years (growing by 0.5% on average), peak loads are increasing on the coldest days of the year. By promoting energy efficiency strategies that aim to not only reduce fossil-fuel use, but to also reduce inefficient use of electricity, we can reduce costs for residents while also freeing up that existing electricity supply to support additional fuel-switching.

One sector of the community that is particularly difficult to reach with energy efficiency and electrification efforts is residents of multifamily housing (MFH). Renters are often those with the highest energy burdens, and yet they do not have the ability to make improvements to their properties. Existing programs supporting heat pump adoption serve homeowners, and landlords have little incentive to install heat pumps or perform other energy efficiency measures in a market where affordable housing is scarce. It will take dedicated effort and innovative programs to reach MFH residents.

#### Define the goals of your project: 250 words max

AEL&P is currently researching the benefits and challenges of adding heat pumps to rental units that are heated by electric resistance. Air source heat pumps provide 2-3 times the heat per

kilowatt-hour compared to the commonly installed electric resistance baseboard heaters, and heat pumps work excellently in our temperate climate in Southeast Alaska. This is a mixed methods study, looking at quantitative data (electricity use) in nineteen rental units both pre- and post-heat pump install and qualitative data (how does this work for renters and landlords?) through surveys and focus groups. Currently, we have 12 units with a full year of pre-heat pump data collected and recently installed heat pumps. We have 7 additional units currently collecting pre-heat pump data, with those heat pump installations set to occur in September. We will continue monitoring whole-home and heating appliance electricity use for a full year after the heat pumps are installed.

#### Specific activities you envision ETIPP supporting: 250 words max

With an ETIPP project, we would like technical assistance in the following areas:

- Continued and expanded data analysis on whole unit, baseboard, and heat pump heating circuits for the rental units in our study. This data analysis will focus on energy consumption patterns, weather impacts – particularly during cold snaps – and changes in electricity consumption before and after heat pump installation
- 2. Outreach and information gathering for other, existing multifamily housing with heat pumps that have been installed (such as the legislative housing building in Juneau's downtown).
- 3. Development of a best practices guide for installation of heat pumps in MFH for both new construction and retrofit. This guide will into account both design and installation practices as well as operation and maintenance support for renters and landlords.
- 4. Assessment of the effect of installing EV charging stations of a MFH parking lots in conjunction with heat pump retrofits.

#### How will results support energy resilience: 250 words max

Access to clean, low-cost hydroelectricity is key to achieving the 80% renewable energy goal. Making the most efficient use of our existing hydroelectric generation resources, transmission and distribution systems, and extending the benefits of energy efficiency and electrification to the entire community are vital components of an equitable and affordable energy transition.

The results of this study will provide quantitative data to support the potential energy and cost savings associated with adding heat pumps and EV charging to existing MFH, and it will provide qualitative data to inform how to incentivize and implement such a program. While this project specifically looks at resistance to heat pump conversions, the results will have application to new construction as well as other types of retrofits, including oil to heat pump conversions.

#### Who in the community will benefit from the project? How will they benefit? 250 words max

With continued and expanded technical assistance through an ETIPP project, we see the following benefits for the community:

1. This project will focus on spreading the benefits of energy efficient heat pumps to residents of multi-family housing, a difficult segment of the population to reach with current programs and often those with the highest energy burdens.

2. Making the most efficient use of our current hydro resources benefits the entire community by helping to keep costs as low as possible. This case study will document what potential energy savings could come from widespread application of heat pumps in existing MFH.

#### Who will be negatively impacted by the project? 250 words max

We don't anticipate that anyone will be negatively impacted by the project.

#### How does your project plan to engage w diverse segments of the community? 250 words max

Through project development and implementation, the project has already engaged the following segments of the community:

- 1. Landlords, through recruitment efforts and interviews with participants
- 2. Renters, through pre- and post- install interviews with participants
- 3. Contractors heat pump installers and electricians
- 4. Municipality (CBJ)
- 5. Community groups (Alaska Heat Smart, Southeast Conference, Renewable Juneau)

As part of an ETIPP project, AEL&P will continue and expand engagement with each of these community groups through public meetings and focused outreach.

### Do you have or plan to seek other sources of funding or support to complement the TA provided by ETIPP? 250 words max

We are already working with NREL data analysts on the pre-heat pump data that has been collected and Information Insights on the surveys. The project is currently funded internally. The results of the study will provide the basis for future grant applications. AEL&P is also preparing a grant application under DOE's Communities Taking Charge funding opportunity to pursue planning and implementation of direct-to-customer EV charging to serve MFH.





JUNEAU COMM Section G, Item 6. ON SUSTAINABILITY

CERTIFICATE OF

# Appreciation

This is to express our sincere appreciation to

# Gretchen Kaiser

for her outstanding contributions and unwavering dedication to sustainability in our community

**3COS Member from 2018 - 2024** 



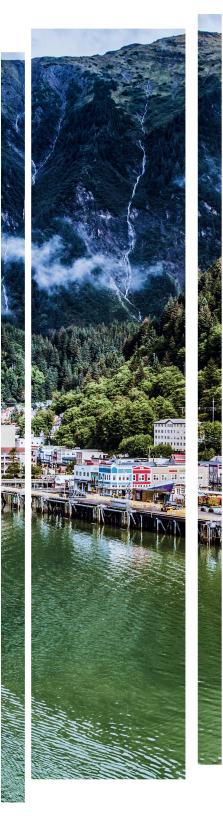
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#### **KATIE KOESTER**

City Manager City & Borough of Juneau

Thank you for <u>6</u> years of service!







JUNEAU COMM Section G, Item 6. ON SUSTAINABILITY

CERTIFICATE OF

# Appreciation

This is to express our sincere appreciation to

# Steve Behnke

for his outstanding contributions and unwavering dedication to sustainability in our community

**3COS Member from 2012 - 2024** 



Value Roester

#### **KATIE KOESTER**

City Manager City & Borough of Juneau

Thank you for <u>12</u> years of service!



#### **Direct to Customer Electric Vehicle Charging for Multifamily Housing**

Concept paper submitted by Alaska Electric, Light, and Power Company Juneau, Alaska



Communities Taking Charge Accelerator
Topic Area 1: Solving for No-Home Charging:
Expanding Charging Access for Privately Owned E-Mobility

#### **Business Contact**

Alec Mesdag, AEL&P CEO and General Manager

Technical Contact

Lori Sowa, AEL&P VP and Director of Energy Services and Metering

#### **Partner Organizations and Key Personnel:**

Hubbell Incorporated Eric Lambert, EV Charging Product Manager

Tlingit Haida Regional Housing Authority
Lorraine DeAsis, Director, Design & Construction Management
Jacqueline Pata, CEO
Joyce Niven, Vice President

#### **Technical Description and Impacts**

#### **Barriers to EV Ownership without Home Charging**

Many studies have shown the transition to plug-in electric vehicles, and the financial and health benefits associated with this transition, is not yet equitable<sup>i</sup>. One of the major barriers to EV adoption is not having reliable and affordable access to charging at home, which is a particularly challenging problem for renters. Through this funding opportunity, the Joint Office recognizes the challenges posed by not having access to charging at home, the importance of equitable access to EV charging, and the need for innovative solutions that go beyond the current suite of options to reduce barriers to EV adoption.

Alaska Electric Light and Power Company (AEL&P) is the electric utility serving Juneau, Alaska, with 100% renewable hydroelectricity. The low-cost and carbon-free electricity supply in Juneau has led many in the community to convert to electric vehicles, and the community is among the nation's leaders in EV ownership. However, those members of our community who do not have access to regular at-home charging are largely prevented from purchasing an EV.

AELP intends to team with Aclara, the manufacturer of AELP's electric meters and meter data collection system, to develop and deploy EV charging stations at multifamily housing complexes that enable direct to customer charging service. Tlingit Haida Regional Housing Authority, a local tribal organization dedicated to meeting affordable housing needs, will be a key partner in identifying and providing access to suitable multifamily housing complexes.

#### **Project Goal**

By installing charging stations at multifamily housing complexes with integrated meters, AEL&P hopes to enable more people in the community to adopt EVs and thereby decrease their cost of transportation. Using a charging station with an integrated meter that is compatible with AELP's existing Aclara TWACS meter collection system, AELP will be able to meter individual charging stations and connect the metered energy to a unique customer account. The usage provided by AELP's charging service will be billed to customers monthly with their regular electric bill, or as a standalone bill for someone who doesn't otherwise have service with AEL&P.

#### **Project Approach**

As a vertically integrated public utility, AEL&P's core competencies are: 1) to build and maintain the infrastructure necessary to deliver electricity on an as-needed basis to its customers, 2) to meter the delivery of energy to customers, and 3) to bill customers for the energy delivered. These are the tasks required of any entity that seeks to provide EV charging service. Because AELP already operates and maintains meter collection and billing systems, it only needs a charging station with an integrated electric meter that can communicate over AELP's existing

meter collection system to allow customers to be billed for their individual charging sessions. This expanded use of systems that AELP's customers already fund through their electric rates will allow all electric customers to get increased value out of utility infrastructure, and it will allow AELP to provide charging infrastructure in a community that is completely unserved by national EV charging providers.

To enable billing under this new service, AELP will first file with the Regulatory Commission of Alaska (RCA) to request approval of a new rate schedule for this charging service. AEL&P is an economically regulated utility and must demonstrate its rates are "just, reasonable, and in the public interest." Despite our location in a remote, isolated community in rural Alaska, AEL&P provides 100% carbon-free electricity at rates lower than the national average. AEL&P is confident that this approach will allow customers who live in multifamily housing to enter the EV market with the confidence that they will be able reliably and affordably charge their vehicles.

To accomplish the goal of this project, AEL&P and its partners will work together through a planning phase followed by a demonstration/deployment phase. In the planning phase, AEL&P will work with stakeholders in the community to identify and select approximately three multifamily housing sites, design installations at these sites, develop a rate schedule for direct to customer EV charging sites, and request approval for the new rate structure from RCA. In addition, AEL&P will work with the Aclara product development team on the design of equipment with the necessary integrated meter and point-of-sale access components to allow multiple users to access the charging equipment and have those sessions be included in the customer's bill.

#### Impact and Role of DOE Funding

The impact of this project goes well beyond the community of Juneau, Alaska by providing a pathway for utilities in rural areas and other "charging deserts" to provide at-home charging access for multifamily housing complexes and at other public sites in a reliable and affordable way. It is potentially transformative. DOE funding provides the financial support needed to advance this approach and the forum to share the results of this effort both locally and nationally.

#### Stakeholder/Community Benefits

The direct beneficiary of this project will be residents of multifamily housing units that will now have access to at-home charging in a reliable and affordable manner. In a broader context, this project will advance the City and Borough of Juneau (CBJ)'s goals to reduce the cost of living for residents, it will reach an underserved population with EV charging access, and it will extend the

health benefits and greenhouse gas reductions associated with the transition from gasoline to a carbon-free source of electricity.

#### **Equipment and Facilities**

This project will require the availability of suitable EV charging equipment with integrated meters that is compatible with AEL&P's metering and billing systems and access to multifamily housing sites where this equipment can be installed. The project team assembled will have all of the required equipment and facilities needed to complete the project.

#### **Project Team Qualifications, Experience, and Capabilities**

AEL&P provides retail electric service for approximately 18,000 customers in the CBJ and produces 100 percent of its base-load generation through hydropower. AEL&P has an existing time-of-use rate for EV charging, offers an innovative Level 2 EV charger rental program, and already serves as the point of contact for community members seeking information about EV charging. In-house metering staff deploy and maintain the rental charger units and manage the data collected from meters for billing. Both Alec Mesdag (CEO) and Lori Sowa (VP and Director of Energy Services and Metering) have extensive experience working with the CBJ and other groups within the community on public and private EV charging strategies and cost-effective charging installations.

Aclara (Hubbell) For nearly five decades, Aclara innovations have helped customers navigate an ever-changing landscape of challenges and opportunities. In that time, Aclara honed its proven processes and delivered best practices that work for utilities across the country and around the world. Aclara has been the industry-leading meter-reading solution with more than 71 million total meter endpoints. Aclara has recently integrated their metering and communication technologies with a Level 2 EV charging device. This provides reliable communications to the electric utility, accurate measurement for EV charging as well as control of charging so that the electric utility can maintain system resiliency as EV adoption continues to increase.

Tlingit Haida Regional Housing Authority (THRHA) Since 1973, the THRHA has been working to meet the affordable housing needs of individuals and families in Southeast Alaska. The THRHA team has completed over 400 home repairs, constructed 18 new single-family homes and 5 new duplexes or larger, 3 commercial building renovations, installed 95 EV Chargers and 349 Heat Pumps over the last 5 years. THRHA owns and operates Fireweed Place, which is a 67-unit apartment building for senior citizens who can live independently, along with other facilities that may be a good fit for the demonstration project. Lorraine DeAsis, Director for Design & Construction Management, has the experience needed to identify appropriate sites and assist with the project from a property management perspective.

#### **Community Benefits Plan**

#### **Community and Labor Engagement**

Community engagement is already underway, and it is anticipated this project will have support from a variety of community partners. In addition of meetings with our project partners, meetings have been held with city staff from the engineering and public works department, Southeast Conference (SEC, the regional economic development organization), and Alaska Housing Finance Corporation (AHFC). Both the CBJ and SEC are involved in planning and implementation projects related to public charging and are familiar with some of the challenges associated with no-home charging, and both groups expressed support for the development of this concept paper and future full application. AHFC are also supportive of the project and plan to participate in the site selection process.

AEL&P is an equal opportunity employer of both union-represented and non-represented employees. Qualified applicants receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or protected veteran status. Wages and benefits are outlined in the Alaska Electric Light and Power Company and IBEW Local #1547 Agreement.

#### **Investment in Job Quality and Workforce Continuity**

Metering staff are working in a field of changing technology – from manual reads of individual meters, to automated meter reading that required only a walk-by, to today's advanced meter infrastructure that collects data over powerlines and is highly dependent on software to ensure data integrity. AEL&P is committed to providing continuing education and new opportunities to our highly-skilled tradespeople. By branching out into new markets, such as the already established EV charger rental program and the new public charging program proposed in this application, union metering positions are provided an opportunity to expand their work into new areas while maintaining the continuity of the workforce.

#### **Advancing DEIA**

Costs in Alaska are high. The cost of living in Juneau is one-third higher than the average U.S. city. Prices are higher across the board: food, housing, healthcare, and transportation. Juneau's electricity rate of 11 cents per kilowatt-hour is equivalent to the average U.S. rate and is one of the lowest among Alaska's 185 communities with electrical rates. Hydroelectricity has proven to be the great equalizer when it comes to supporting local diversity, lower- income residents, and keeps the remainder of the community's costs lower.

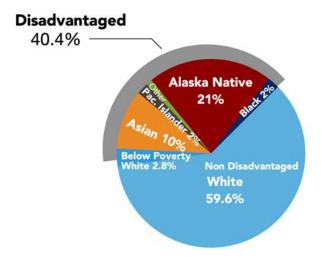
Alaska Native households in Juneau are much more likely to be low-income. According to Housing and Urban Development income limits, 62% of Juneau's Alaska Native households are

low income, including 48% that are very low income. A 2019 survey found that 61% of Alaska Native households in Juneau are cost-burdened or severely cost-burdened—spending 30% or more of household income toward housing costs—includes 17% of respondents who are severely cost-burdened, meaning they spend half or more of their household income on housing costs.

The operational cost savings for the owner of an electric vehicle in Juneau are significant. The average Juneau driver will put approximately 10,000 miles on their vehicle in a year. At AEL&P's current residential electricity rate, this would cost \$339 over the course of the year. If the charging happened at night as part of the time-of-use program, the cost is cut in half (\$170). For comparison, fuel costs for a gas vehicle that gets 25 miles per gallon, at a cost of \$3.59 per gallon<sup>ii</sup>, would be \$1,436 over the course of the year. This is a 76-88% reduction in transportation fuel costs.

#### Justice 40 Initiative

AEL&P's customers are just over 40% disadvantaged, including nonwhite residents and those living below poverty. Alaska Natives make up 21% of the community population, and therefore AELP customers.<sup>III</sup> Two of the expected benefits under this project are a decrease in energy burden and increased parity in clean energy technology access and adoption.



Juneau's demographic breakout, AEL&Ps customer base, is 40.4% disadvantaged.

<sup>&</sup>lt;sup>1</sup> A Perspective on Equity in the Transition to Electric Vehicles. MIT Science and Policy Review. Aug 30, 2012. Hardman, S, Fleming, K.L., Khare, E, Ramadan, M. M.

<sup>&</sup>lt;sup>ii</sup> January 2024 gasoline price data for Juneau, Alaska accessed from https://dcra-cdo-dcced.opendata.arcgis.com/datasets/gas-prices-all-years/explore

iii Race data: 2020 Census Data for Redistricting <a href="https://live.laborstats.alaska.gov/census-return-result?value%5B0%5D=4412">https://live.laborstats.alaska.gov/census-return-result?value%5B0%5D=4412</a>; Poverty data: 2021 ACS 5-Year Estimates Detailed Tables



Engineering and Public Works Department 155 Heritage Way Juneau, Alaska 99801 Telephone: 586-0800

DATE: July 03, 2024

TO: Nick Waldo, Chair, Juneau Commission on Sustainability FROM: Dianna Robinson, Environmental Project Specialist, CBJ

SUBJECT: Sustainability Dashboard/Climate Action Community Dashboard

#### Chair Waldo,

Juneau's Climate Action Plan (JCAP) was published in November 2011 thanks in large part to the efforts of JCOS members at that time. Since then, CBJ has made significant strides in accomplishing the goals and priorities set forth in that document, as well as the Juneau Renewable Energy Strategy (JRES). However, to date our website and outreach has not been successful in telling the story of these achievements.

As this group is aware, it is very common for municipalities with sustainability initiatives and CAPs to also have a sustainability dashboard to communicate with the public. In my research, the best versions I came across for a municipal sustainability dashboard/website all were developed by a company called Kim Lundgren Associates (KLA). They exclusively work with local governments on climate action planning and storytelling and offer significant support services at a very reasonable set rate.

I have attached a short pamphlet on their dashboard, and below are a few examples that KLA provided to showcase what their final product can look like:

#### Sample Materials

Climate Action Plan- Executive Summary Style
GHG Emissions Inventory
Focus Area Fact Sheet
Maritime Business Resilience Toolkit

#### Sample Dashboards

New Bedford, MA
Nashua, NH
Atherton, CA
Sunnyvale, CA
Worcester, MA

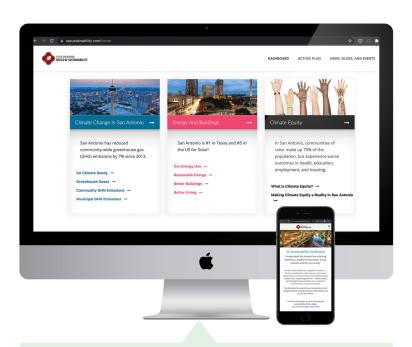
If this project is of interest to JCOS, I can provide details at the next meeting for potential next steps.

## KLA COMMUNITY DASHBOARD

### The urgent call for collective climate action is clear.

Use the **KLA COMMUNITY DASHBOARD** to engage your community and inspire bold action.

**Track progress. Provide transparency. Empower your community to act.** This storytelling platform was developed specifically for local governments pursuing climate, sustainability, and resilience solutions.



#### TRUSTED BY LOCAL GOVERNMENTS

"The Livable Nashua dashboard created a totally new way for the City to educate the public on the many great programs and initiatives we are already doing, provide transparent data and really start engaging the community on long-term goal setting. Working with KLA has been a truly positive relationship. They are organized, clear, concise and completely able to implement projects on schedule."

Sarah Marchant, Director of Community Development, Nashua NH

"Working with Kim and her team has been so easy. They are experts in both Climate Action Planning and web design.

The matchup is perfect when it comes to the development of our dashboard."

Crystal Najera, Climate Action Administrator, Encinitas, CA

#### **ENHANCED DASHBOARD FEATURES**



## ANNUAL REPORT

Easy "Print Button" translates into a professionally designed report



# ACTION PLAN IMPLEMENTATION TABLE

Highlight all plan elements and demonstrate progress



## DATA VISUALIZATION

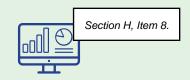
Go beyond graphs with fun and creative data visualizations



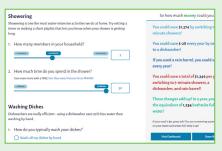
Actively engage community members with **interactive educational tools.** 



Translate complicated language into user-friendly visuals.



...and MORE with these additional dashboard features!



**CALCULATORS** 



**INFOGRAPHICS** 



**QUICK POLLS** 



**RESOURCE CENTER** 



STORY MAPS



GHG REDUCTION PATHWAYS

GRAPH



KLA offers **Communications Support** that drives more people to your Dashboard and connects the dots between community goals and their individual actions!









## Additional Services to Complement the Dashboard

- Climate Action, Sustainability & Resilience Planning
- Greenhouse Gas (GHG) Inventories
- Communications & Branding
- Equitable Community Engagement



USE OUR ONLINE SCHEDULING TOOL!

SCHEDULE A TIME TO CHAT!

www.kimlundgrenassociates.com/dashboard

#### **Engaging. Customizable. Affordable.**

With annual licenses starting at less than \$10,000 a year, the **KLA Community Dashboard** can transform your climate and sustainability efforts into an engaging, actionable on-line platform.